

**Abstract**

**NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES AND  
SCREENING METHODS FOR IMMUNOSUPPRESSIVE AGENTS**

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10 The invention provides novel polypeptides which are associated with the transcription  
complex NF-AT, polynucleotides encoding such polypeptides, antibodies which are reactive with  
such polypeptides, polynucleotide hybridization probes and PCR amplification probes for detecting  
polynucleotides which encode such polypeptides, transgenes which encode such polypeptides,  
15 homologous targeting constructs that encode such polypeptides and/or homologously integrate in  
or near endogenous genes encoding such polypeptides, nonhuman transgenic animals which  
comprise functionally disrupted endogenous genes that normally encode such polypeptides, and  
transgenic nonhuman animals which comprise transgenes encoding such polypeptides. The  
invention also provides methods for detecting T cells (including activated T cells) in a cellular  
20 sample, methods for treating hyperactive or hypoactive T cell conditions, methods for screening  
for immunomodulatory agents, methods for diagnostic staging of lymphocyte differentiation,  
methods for producing NF-AT proteins for use as research or diagnostic reagents, methods for  
producing antibodies reactive with the novel polypeptides, and methods for producing transgenic  
nonhuman animals. Also included are methods and agents for activation of NF-AT dependent  
transcription, including agents which interfere with the production, modification of nuclear or  
cytoplasmic subunits, or the nuclear import of the cytoplasmic subunits. In particular, screening  
tests for novel immunosuppressants are provided based upon the ability of NF-AT to activate  
transcription.